

**Responsiveness Summary to Comments Received on EPA's Public Notice Dated
November 18, 2005, Regarding Adding Additional Waters to Iowa's 2004
Clean Water Act Section 303(d) list**

EPA received comments from seven individuals or organizations in response to the public notice of EPA's decision to add 20 waters and associated pollutants of concern to Iowa's 2004 Clean Water Act (CWA) Section 303(d) list, submitted to EPA for approval on June 3, 2005. Comments were provided by the following individuals or organizations:

1. Diana Karlowski (East Fork Wapsipinicon River)
2. Iowa Farm Bureau Federation (20 added waterbodies, authority of CWA)
3. Iowa Environmental Council (20 added waterbodies)
4. Iowa Department of Natural Resources (listing issues, 20 added waterbodies)
5. Sierra Club (stream classification/Credible data law)
6. Iowa Corn Growers Association (20 added waterbodies, authority of CWA)
7. Donna Buell (Milford Creek)

Several comments pertain to issues not covered by EPA's public notice. EPA invited comment solely on its decision to add twenty water bodies to the Iowa CWA 2004 303(d) list. EPA's November 14, 2005, decision to partially approve Iowa's list was not subject to public comment. However, where comment was provided by the public regarding the effect of State law or IDNR regulations and implementation procedures on EPA's review of Iowa's 2004 CWA Section 303(d) list, EPA provides appropriate responses.

Several comments addressed general issues such as the application of Iowa's Credible Data Law, IDNR's methodology for developing its impaired waters list and Iowa's water quality standards to the State's listing process and EPA's review. Although these comments do not pertain to specific waters or specific EPA actions, EPA would like to briefly address them in order to provide a comprehensive treatment of public comment.

First, several organizations expressed concern over the application of Iowa's Credible Data Law to EPA's partial approval of the State's 2004 CWA Section 303(d) list and EPA's decision to add 20 additional waters to that list. In response, we wish to reiterate that EPA reviewed the State's 2004 CWA Section 303(d) list in accordance with federal regulations at 40 CFR 130.7(b), particularly 40 CFR 130.7(b)(5) which requires that, "each State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the list," and 40 CFR 130.7(b)(6) which requires that states provide to EPA, "a rationale for any decision to not use any existing and readily available data and information." Regardless of the requirements of Iowa's Credible Data Law, each state is required to assemble and evaluate all existing and readily available data and information and provide its justification for excluding any of that data and information in its list development. Where IDNR provided justification, EPA evaluated that justification in view of the State's water quality standards and federal requirements. For example, where IDNR provided suitable information that supported a determination that certain data or information did not represent current water quality conditions or were not adequately quality assured, EPA did not consider that data or

information in evaluating IDNR's listing decision. In instances where no rationale was offered or where the rationale was not technically defensible, EPA determined the attainment status of any given water based on all existing and readily available data and information.

Second, three organizations commented that EPA either was inappropriately guided by the State's "Methodology for Iowa's 2004 water quality assessment, listing, and reporting pursuant to Sections 305(b) and 303(d) of the federal Clean Water Act" or applied it inconsistently in its partial approval of the State's 2004 CWA Section 303(d) list and decision to add 20 additional waters to that list.

It is important to understand that EPA does not approve or disapprove a state's methodology for developing its CWA Section 303(d) list. However, EPA does take action on new or revised state water quality standards. To the extent the methodology contains a new or revised water quality standard, the State is required to submit the new or revised water quality standard to EPA to review and approve such provision before the standard could be effective for CWA purposes (40 CFR 131.21(c) and (d)). Iowa's 2004 Methodology did not contain new or revised water quality standards, and therefore was not subject to EPA review and approval.

If EPA finds, during its review of a state's CWA Section 303(d) list submission, that the application of the state's methodology has resulted in an incomplete CWA Section 303(d) list, EPA may disapprove the list. Regardless of the methodology, EPA must review the list for consistency with a state's approved water quality standards, as well as the relevant provisions of the CWA and the regulations.

EPA's "Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act" (July 21, 2003) describes the relationship between a state's methodology that is not part of the state's applicable water quality standards and EPA's review of the state's CWA Section 303(d) list.

EPA will not approve or disapprove the methodology. However, EPA will consider the State's methodology in its review and approval or disapproval of the Category 5 waters in a State's Integrated Report. For example, if EPA believes a methodology will not result in a credible accounting of Category 5 waters (those waters required to be on the 303(d) list), EPA may disapprove the State's submission for failure to include certain waters in Category 5. Upon a request by EPA, the State must provide any excluded data or information and a case-specific rationale for not using the data in an assessment determination. EPA may review the data and rationale, disapprove listing decisions if appropriate, and make changes in the list based on inclusion of data and information that was improperly excluded. Failure by a State to provide a defensible technical rationale for a listing methodology, or for a decision to exclude data or information from consideration, may result in partial disapproval of the list for failure to include waters in Category 5, and potential additions of waters to the list by EPA.

Although State statute and the IDNR methodology might have been used by IDNR to identify impaired waters, they are not part of the state's water quality standards and are not subject to EPA approval. EPA considered the State's methodology, to the extent that it reflects a reasonable interpretation of the State's water quality standards and sound science, in determining whether to approve or disapprove the 2004 CWA Section 303(d) list. EPA did not rely solely on the methodology in reviewing Iowa's 2004 Section 303(d) list. Instead, EPA reviewed all relevant and readily available information including information improperly excluded under the State's methodology, to determine if the Iowa list was developed consistent with the underlying State water quality standards and federal regulations.

Third, one organization commented that the State's 2004 CWA Section 303(d) list was based on water quality standards which are not consistent with the Clean Water Act. It is important to note that Federal regulations at 40 CFR 130.7(b) require that states identify "water quality-limited segments still requiring TMDLs" as their CWA Section 303(d) list. Federal regulations define "water quality-limited segments" as those which do not meet applicable water quality standards or are not expected to meet those water quality standards after the application of technology-based effluent limitations. The applicable water quality standards for Iowa are those water quality standards which have been approved by EPA and, therefore, are effective for purposes of CWA applications (40 CFR 131.21(c) and (d)). Possible or anticipated revisions to the effective State water quality standards are not considered by the State in the development of or by EPA in its review and approval of the CWA Section 303(d) list.

The following section of this responsiveness summary identifies and provides responses to comments that address EPA's decision to add specific waters to Iowa's 2004 CWA Section 303(d) list.

1. IDNR commented that EPA's decision to add 5 stream segments (East Fork Wapsipinicon River, 01-WPS-0190_3; Sugar Creek, 02-CED-0170_1; Walnut Creek, 05-NSH-0100_1; West Branch One Hundred and Two River, 05-PLA-0040_1; and West Tarkio Creek, 05-TAR-0020_0) to Iowa's 2004 CWA Section 303(d) list was based on data IDNR considered "too old to represent current conditions."

Response: Federal regulations at 40 CFR 130.7(b)(6)(iii) specifically require the State to provide "a rationale for any decision to not use any existing and readily available data and information" in the development of its CWA Section 303(d) list. EPA's "Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act" provides guidance on the issue of "data age" and "unrepresentative data."

Data should not be excluded from consideration solely on the basis of age. The State's methodology should specifically discuss how the State considered age in determining relevance. A State should consider all data and information. However, in this consideration, a State may determine that certain data are no

longer representative of current conditions (e.g., land use has changed significantly, point source discharges have changed significantly, the hydrology of the water has been modified, and/or field and laboratory methods have changed), and therefore may decide not to use the data for making the assessment determination.

IDNR did not provide waterbody-specific data or information which supported its conclusion that bioassessment data pertaining to these streams was not representative of current water quality conditions nor is EPA aware of any information which suggests that this data is not representative.

EPA is adding four of these five waters to Iowa's 2004 CWA Section 303(d) list based on its assessment of this existing and readily available data. The East Fork Wapsipinicon River (01 –WPS-0190_3) is not being added, as explained below.

2. IDNR commented that a data entry error within the IDNR ADB+ water quality database resulted in bioassessment data being attributed to the wrong stream segment of the East Fork Wapsipinicon River (01 –WPS-0190_3).

Response: The East Fork Wapsipinicon River (01-WPS-0190_3) is not being added to the State's list by EPA based on IDNR's correction of an error in the original data entry upon which this determination was made by EPA. In its comments to EPA's public notice, IDNR stated that the bioassessment data originally described as collected from Class B, Limited Resource segment 01-WPS-0190_3 was actually collected from General Use segment 01-WPS-0190_6. As explained in EPA's Decision Document accompanying its November 14, 2005, letter to IDNR, EPA agrees with IDNR's belief that neither "the application of their bioassessment protocols, nor the indices assigned to various support categories, to General Use streams is scientifically supportable" (EPA Decision Document Supporting Its Partial Approval of Iowa's Clean Water Act Section 303(d) List for 2004, page 11). Since this segment of the East Fork Wapsipinicon River (01-WPS-0190_6) is not designated for an aquatic life use (i.e., General Use only), the bioassessment data cannot serve as the basis for listing this segment either.

3. EPA received one comment in support of EPA's original decision to add the East Fork Wapsipinicon River (01-WPS-0190_3) to Iowa's 2004 CWA Section 303(d) list citing volunteer monitoring data showing high levels of nitrates, atrazine and other chemicals.

Response: EPA's basis for adding this segment to Iowa's list was bioassessment data indicating water quality impairment. As the response to public comment number two states, IDNR has provided information regarding this data which would preclude its use in making a determination of impairment for the General Use portion of this water. EPA is not aware of pollutant-specific water quality data for this water which indicates that any designated uses are impaired. Iowa's water quality standards contain numeric water quality criteria for nitrates and atrazine for only the Class C, drinking water supply, use. The East Fork Wapsipinicon River has no segments designated for Class C use. Any

water quality data for East Fork Wapsipinicon River should be submitted to IDNR for their assessment as they develop Iowa's 2006 CWA Section 303(d) list.

4. IDNR commented that EPA's decision to restore two streams (Milford Creek, 06-LSR-0305_0; and Middle Fork South Beaver Creek, 02-CED-0432_1) and add one stream (South Skunk River, 03-SSK-0020_1) to Iowa's 2004 CWA Section 303(d) list was not consistent with IDNR's methodology document with regard to the treatment of bioassessment data on General Use waters and non-wadeable Class B streams for determinations of water quality impairment.

Response: IDNR's comment stated that EPA, in adding Milford Creek and the Middle Fork South Beaver Creek to Iowa's 2004 CWA Section 303(d) list, was not consistent in its application of IDNR's methodology with regard to the treatment of bioassessment data for General Use waters. As discussed previously, EPA considered the State's methodology, to the extent that it reflects a reasonable interpretation of the State's water quality standards and sound science, in determining whether to approve or disapprove Iowa's 2004 CWA Section 303(d) list. However, EPA did not rely solely on the methodology in reviewing Iowa's 2004 Section 303(d) list. Instead, EPA reviewed all relevant and readily available information, including information improperly excluded under the State's methodology, to determine if the Iowa list was developed consistent with the underlying State water quality standards and federal regulations. In its assessment of information developed by IDNR in support of TMDL development for these waters (i.e., Stressor Identification Document), EPA determined that there was clear evidence of water quality impairment and that IDNR had not demonstrated "good cause" for not including these streams on its list (40 CFR 130.7(b)(6)(iv)). IDNR's Stressor Identification Documents for these two segments clearly identified water quality impairments inconsistent with the State's General Water Quality Criteria (e.g., nuisance algal blooms, depressed dissolved oxygen concentrations and aesthetically objectionable conditions) generally attributable to elevated nutrient concentrations. In response to its public notice, EPA received comment and photographs corroborating this determination. EPA will add these two segments to the Iowa 2004 CWA Section 303(d) list.

EPA's decision regarding the South Skunk River is discussed under public comment number five.

5. IDNR commented that EPA's decision to add 5 stream segments (South Skunk River, 03-SSK-0020_1; West Jackson Creek, 05-CHA-0064_0; Dick Creek, 05-CHA-0067_0; Walnut Creek, 05-NSH-0100_2; Silver Creek, 05-NSH-0120_0) to Iowa's 2004 CWA Section 303(d) list based on data generated by IDNR's Fisheries Bureau was inappropriate and inconsistent with IDNR's listing methodology, which broadly considers this data to be inadequately supported by quality assurance documentation.

Response: Earlier responses in this document describe EPA's treatment of the State's listing methodology and the requirements of federal regulations regarding "all existing and readily available water quality-related data and information" in the context of its

review of Iowa's 2004 CWA Section 303(d) list. Specifically, regarding these five stream segments, EPA reviewed IDNR Fisheries Bureau bioassessment data from the IDNR water quality database, including the Index of Biological Integrity (IBI) ratings for fish communities assigned by IDNR to these segments. These biological assessments are performed by fisheries biologists within IDNR's Fisheries Bureau, the data is entered into IDNR's water quality database and IBIs are calculated by IDNR's Geological Survey and Land Quality Bureau. In its review of Iowa's list, EPA considered it reasonable to treat this IDNR-generated data as scientifically adequate and representative of current water quality.

IDNR provided comments regarding the status of the South Skunk River (03-SSK-0020_1) in the context of several issues. IDNR corrected an error in EPA's original assessment that bioassessment data for fish served as the basis for EPA's determination that water quality impairment exists for this segment. In fact, bioassessment data indicating a water quality problem were based on an assessment of the benthic macroinvertebrate community within the river rather than the fish community. In its Decision Document accompanying its November 14, 2005, letter to IDNR, EPA agreed with IDNR's determination that:

rivers draining watersheds larger than 500 square miles are not suited to field methods applied to assess the benthic macroinvertebrate communities of wadeable streams and the data gathered by their application likely does not accurately represent the biological condition of these waters (page 12).

This segment of the South Skunk River drains a watershed area greater than 500 square miles and, therefore, this bioassessment data should not serve as the basis for a determination of water quality impairment.

EPA will add four of these five stream segments to the Iowa 2004 CWA Section 303(d) list. The South Skunk River (03-SSK-0020_1) will not be added to Iowa's 2004 CWA Section 303(d) list.

6. IDNR commented that EPA added the wrong segment of Clear Creek (02-IOW-0160_3) to Iowa's 2004 CWA Section 303(d) list.

Response: IDNR stated that EPA had identified the wrong segment of Clear Creek receiving illegally discharged septic results in the water quality impairment documented in material submitted to EPA by IDNR. IDNR identified 02-IOW-0161_0 rather than 02-IOW-0160_3 as the segment of Clear Creek for which the water quality information was submitted. EPA will not add Clear Creek 02-IOW-0160_3, but will add Clear Creek 02-IOW-0161_0 to Iowa's 2004 CWA Section 303(d) list.

7. IDNR commented that EPA's decision to list Buffalo Creek (01-WPS-0110_1) on Iowa's 2004 CWA Section 303(d) list misinterpreted IDNR's use of bioassessment data as described within its listing methodology.

Response: EPA reviewed the comment and information provided by IDNR in response to EPA's public notice specific to this segment of Buffalo Creek. In its original decision, EPA had relied on IDNR's qualitative statements regarding the biological condition of this segment. Although IDNR's listing methodology is not clear regarding the interpretation of bioassessment data using IDNR's qualitative (i.e., good, fair, poor) and quantitative (i.e., Biological Impairment Criteria) treatments, IDNR's comment clarified that "the bioassessment data for this segment of Buffalo Creek suggest full support of its designated aquatic life uses" based on the application of IDNR's Biological Impairment Criteria for wadeable streams. EPA evaluated the bioassessment data for this segment against IDNR's quantitative criteria and reached the same conclusion. Based on IDNR's clarification, EPA will not add this segment of Buffalo Creek to Iowa's 2004 CWA Section 303(d) list.

Waters Added by EPA to Iowa's 2004 CWA Section 303(d) List

Water	ADB+ Identifier	Pollutant	Category
Mississippi River	01-NEM-0010_4	Nutrients	5a
Muchakinock Creek	04-LDM-0140_2	Unknown	5b
Milford Creek	06-LSR-0305_0	Nutrients	5a
Middle Fork South Beaver Creek	02-CED-0432_1	Nutrients	5a
Windmill Lake	05-PLA-00430_L	Turbidity	5a
North River	04-LDM-0300_2	Unknown	5b
Bear Creek	02-IOW-0180_1	Unknown	5b
Sugar Creek	02-CED-0170_1	Unknown	5b
West Jackson Creek	05-CHA-0064_0	Unknown	5b
Dick Creek	05-CHA-0067_0	Unknown	5b
Little River	05-GRA-0080_0	Unknown	5b
Walnut Creek	05-NSH-0100_1	Unknown	5b
Walnut Creek	05-NSH-0100_2	Unknown	5b
Silver Creek	05-NSH-0120_0	Unknown	5b
West Branch One Hundred and Two River	05-PLA-0040_1	Unknown	5b
West Tarkio Creek	05-TAR-0020_0	Unknown	5b
Clear Creek	02-IOW-0161_0	Organics	5a